Chicagoland Skywarn

Issue 4, Volume 1 October 2009

Special Interest Articles:

- CoCoRaHS Training Session
- Does Daylight Saving Time Save Energy
- Wisconsin and Michigan Fall Color Reports

Individual Highlights:

CoCoRaHS Training Session Oct. 14th in Oak Lawn

From NWS Chicago Website

Already a CoCoRaHS observer or are interested in joining the volunteer network of precipitation observers in northeast Illinois? The National Weather Service, along with the University of Illinois Extension office in southern Cook County and the Village of Oak Lawn, will be hosting a training session for any interested observers/volunteers on **WEDNESDAY, OCTOBER 14TH, 2009** starting at **7pm.**

To participate in the training session, please register at the University of Illinois Extension go to https://webs.extension.uiuc.edu/registration/?RegistrationID=3413

Training is free and typically lasts between an hour and an hour and a half and covers all of the essential information that you will need to sign up for the program, be able to correctly set up your rain gage (and snow board), and how to properly report your observations.

CoCoRaHS stands for the Community, Collaborative Rain, Hail and Snow network and has been active in Illinois since December 2006 and in Indiana since January of 2007 and has grown to having over 2,000 observers that have signed up across both states with over 600 actively reporting per day. Anyone with an interest in weather and measuring it are welcome to join the CoCoRaHS community. The only equipment needed to participate is a $30 rain gage that can be bought from multiple vendors, as well as a snow board to measure snow off of. Observers measure rain or snow once in the morning and report their data through the CoCoRaHS web site at www.cocorahs.org. If you cannot attend this training, but would still like to participate in CoCoRaHS, please visit the web site to sign up and other training sessions will be offered throughout the fall/winter/spring across the region.

This training session is focused on the Oak Lawn area with the intent of creating a dense network of observers to assist in research being performed by the University of Illinois on the mechanisms behind the transmission of the West Nile Virus. Mosquitoes can carry this virus to humans and water has a big effect on mosquito populations. With the West Nile virus being found at some places more than others, their research seek to prove that differences in moisture are part of why this happens. The data collected from observers in this area over the next 4 years will help them to compare detailed precipitation to mosquito density and virus tests to help them see how precipitation is involved with the differences that occur in different places.

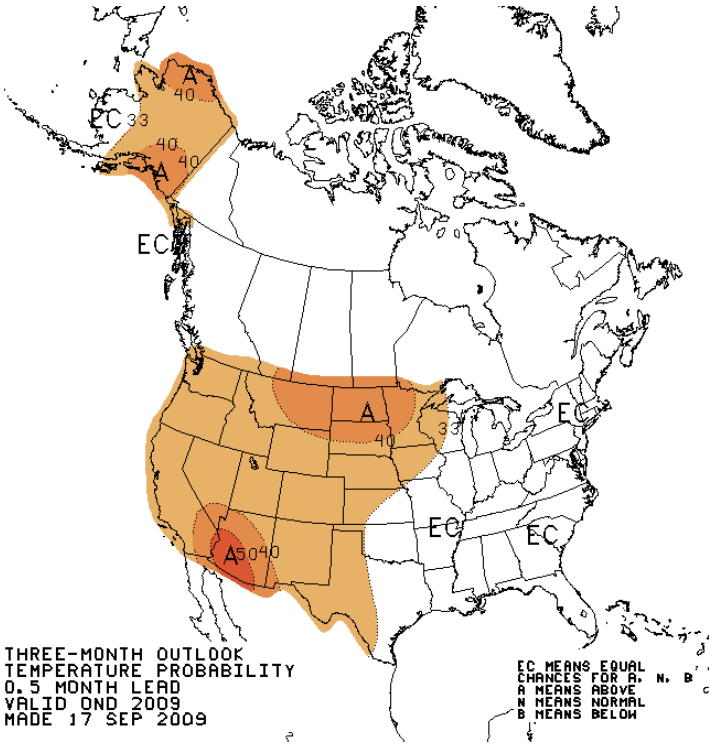
If you have any further questions about CoCoRaHS, please contact Tim Halbach from the NWS Chicago at 1-815-834-0600 x648.

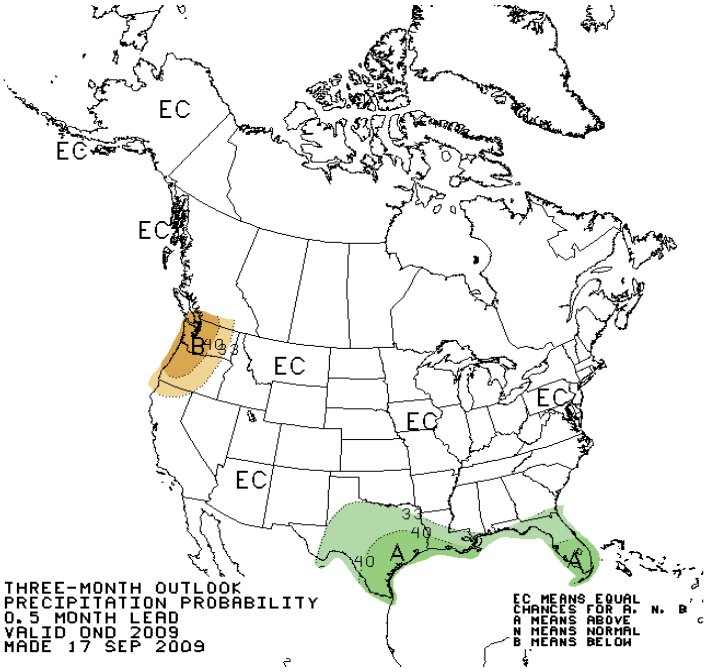
Three Month Outlook

From NWS Climate Prediction Center

These and many other climate maps are available at:

http://www.cpc.noaa.gov/products/predictions/long_range/seasonal.php?lead=1





Does Daylight Saving Time Really Save Energy?

By Mike Swiatkowski, AA9VI

If I asked this question in Chicago or Indianapolis I may get two entirely different answers. Nearly 43% of Hoosiers opposed the change that brought Indiana in 2006 into synchronization with the rest of the country by finally observing Daylight Saving Time… statewide. Most of Indiana observed Eastern Standard Time year-round. Metro Cincinnati and metro Louisville counties observed EST/EDT. Metro Chicago and Evansville counties observed CST/CDT. What a mess it was! Today, most of the state is on EST/EDT except for the Evansville and Chicago area counties which remain on CST/CDT.

The question which even today across this country provokes debate: Does DST save energy? In a short answer, no. Why? Originally in Ben Franklin's time the idea was to have more people doing things when the light was out. Ben Franklin thought how much better it would be if people didn't need candles for an extra hour each night. On the surface, this was a good idea.

An article from October 2008 from the National Bureau of Economic Research entitled "Does Daylight saving Time Save Energy. Evidence from a Natural Experiment in Indiana" is a great resource for understanding this argument. It states that by making the change to DST statewide, Indiana actually increased statewide energy costs by $9M annually.

Why? Simple. Air Conditioning. Ben Franklin probably never thought of that factor in his time. Sadly, the Department of Transportation doesn't understand it today. When we have an extra hour of sunlight while we are at home in the summer we need additional energy to cool our homes on those hot summer days. If it was already dark, outdoor temperatures would be lower.

Now, so why do we observe DST? Simple, again. We like the extra hour of sunlight in the summer months working in the yard or swimming on the beach. Extra sunlight in the evening hours makes for a better commute. There is a reduction of accidents in the morning winter hours on the east side of the time zones (where more people live nationwide).

Some people suffer from SAD or Seasonal Affective Disorder. When we see more sun, melatonin levels are reduced and serotonin levels increase. Many individuals moods are more positive the more sun they see. This is a physiological reaction to Vitamin-D from blue sunlight. Overproduction of melatonin, which is produced in the dark, particularly at night, can disrupt out circadian rhythm by making us feel sleepier. Low serotonin levels are linked to depression. In other words, the careful balance of melatonin and serotonin are disproportionately tilted towards more of melatonin during the longer nights of the winter months.

So, the real reason we observe DST is that it makes us feel better. Air conditioning has unfortunately been the trump card that neutralizes any energy savings from an extra hour of sunlight in the summer months.

There is an expression that you can't put a price on happiness. This is a great example of that.

Remember to set your clocks back an hour when Standard Time begins November 1st.

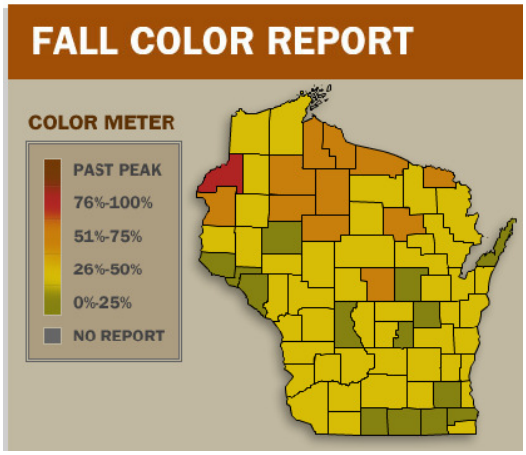
Wisconsin and Michigan Fall Color Report

By Mike Swiatkowski, AA9VI

Are you going to be cruising for colors this fall? Travel Wisconsin has a great update for you at:

http://www.travelwisconsin.com/fallcolor_report.aspx

There you can click on each county in the state and determine the best time for colors in the state.



Michigan.org's "Featured Destinations" tab lists the current conditions in that state.

One of my favorite tours is in Michigan's Copper Country between Baraga and Copper Harbor on US-41.

The "bible" of meterology Available at most bookstores. Thanks for the suggestion, Craig, KC9HWK

The DuPage Amateur Radio Club has a wealth of information on its site: ***skywarn.w9dup.org***

Weather "or-not"

By George Geotsalitis, NB9R

If you don't own a NOAA Weather Radio but have broadband access, *Weather Underground* provides a webpage which contains all of the active NOAA weather radio channels nationwide

Just go to the URL shown below and choose the location(s) nearest you to hear the broadcasts on your PC.
www.wunderground.com/wxradio/index.html

Additionally, TextAloud uses voice synthesis to convert text into spoken audio. Listen on your PC or create MP3 or WMA files for use on portable devices like iPods, PocketPCs and CD players. Also available are optional premium voices for a wide variety of accents and languages.
www.nextuptech.com

Not weather, But…

By George Geotsalitis, NB9R

Although the New Madrid fault system gets the majority of the press in the Midwest, the most recent (2008) earthquake and aftershock experienced in southern Illinois was the result of the Wabash fault system which extends (roughly) through White, Edwards, Wabash and Lawrence Counties in Southeastern Illinois. The epicenter was in the town of Mt. Carmel in Wabash County. In addition to the Wabash fault, Illinois has several fault systems throughout the state; some of which include: St. Genevieve, Cottage Grove, Shawnee-Rough Creek, Sandwich and Plum River. For details on the location of these and other faults, see the Illinois Geological Survey website below.

Within the New Madrid Seismic area and centered in northeastern Arkansas, just west of Memphis Tennessee, the most powerful earthquakes to impact North America (estimated at magnitude 8.0 {or higher} on the Richter scale) heavily damaged the Mississippi Valley in December 1811 and January 1812. While the science of the time did not allow detailed parametric analysis of the tremors, they were experienced in at least 28 states. Employing damage assessments and personal accounts of the events, seismologists estimated that the shocks were felt **lightly** over 2,000,000 mi^2; **moderately** over an area of 965,000 mi^2 and **strongly** over an area of 50,000 mi^2; contrast this with the 1906 San Francisco earthquake that was felt **moderately** over (only?) 60,000 mi^2.

While a 90% chance for an (New Madrid) earthquake of magnitude 6.0 or greater has been forecasted by the year 2040, newer science might suggest otherwise. An interesting article in Science Daily (12/06), suggests that scientists from Northwestern University, the U.S. Army Engineer Research and Development Center and the University of Illinois at Chicago have found that the New Madrid seismic area appears to be "**Cold and Dying**."

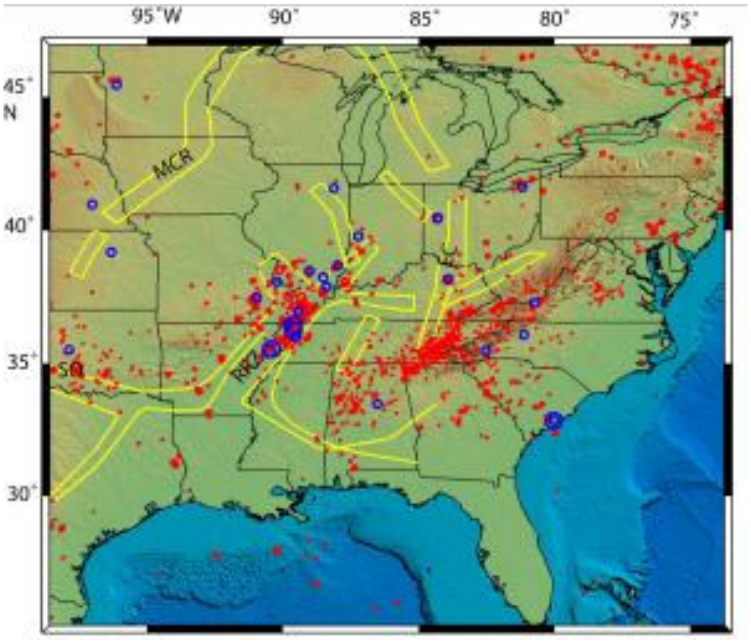
Science Daily article: www.sciencedaily.com/releases/2006/12/061211221056.htm.

Illinois State Geological Survey can be found at: www.isgs.uiuc.edu/research/earthquake-hazards/earthquake-haz.shtml

Richter Magnitudes and **energy release** details can be found at: http://en.wikipedia.org/wiki/Richter_magnitude_scale#Richter_magnitudes

Apple Seis**mac** (free laptop accelerometer software) www.suitable.com/tools/seismac.html

Quake Catcher Network http://qcn.ucr.edu/



Researchers looked at data used in the new edition of the Geothermal Map of North America (American Association of Petroleum Geologists, 2004), which shows all the measurements of the heat coming to the Earth's surface (heat flow) taken from boreholes. They found that thermally New Madrid is surprisingly similar to other areas of the eastern United States. (Image courtesy of Northwestern University) - *Copied from Science Daily link above*

Chicagoland Skywarn

INQUIRIES/SUGGESTIONS
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Join our Private Yahoo list (requires free membership)
Sign up at:
http://aa9vi.com/wx

Chicagoland
Skywarn Liaison Frequencies
(from FISHFAR):
Chicago: 442.975+ MHz
PL114.8 Hz
Schaumburg: 442.9+ MHz
PL 114.8 Hz
Gilberts: 146.925- MHz
PL 100.0 Hz
Gilberts: 442.925+ MHz
PL 114.8 Hz
Joliet: 442.925+ MHz
PL 114.8 Hz

APRS Packet WX: 144.39 MHz
Winlink Packet: 145.61 MHz

S.E. Wisconsin Skywarn
145.13- MHz PL 127.3 Hz

NWS Chicago Website:
weather.gov/chicago

Local Skywarn Repeater Map

CHICAGOLAND SKYWARN

MEMBER'S NAME
STREET ADDRESS
CITY, ST 60600